

### **What Is Claimed Is:**

The embodiments of the invention in which an exclusive property or right is claimed are defined as follows:

- 5           1.       A manifold in combination with a plurality of laser block assemblies for simultaneously processing the plurality of laser block assemblies, the manifold comprising:
  - an elongated member that includes
    - a hollow chamber extending along a portion of the elongated member,
    - 10       a fluid port extending between the hollow chamber and the exterior of the elongated member, the fluid port adapted to be mated with a processing station, and
    - a plurality of passages extending between the exterior of the elongated member and the hollow chamber;
- 15       wherein the plurality of laser block assemblies are fluidly connected with the hollow chamber, each one of the plurality of laser block assemblies mounted to an individual one of the plurality of passages extending between the hollow chamber and the exterior of the elongated member to permit the simultaneous processing of the plurality of laser block
- 20       assemblies through the elongated member.
2.       The manifold of claim 1, wherein each of the laser block assemblies are mounted to the elongated member with a seal.
- 25       3.       The manifold of claim 2, wherein the seal comprises:
  - a first tube fluidly connected to one of the plurality of passages of the elongated member;
  - a fill tube fluidly interconnected between the first tube and one of the laser block assemblies; and
  - 30       a connector between the first tube and the fill tube.

4. The manifold of claim 3, wherein the first tube is an isolation tube formed from a non-conductive material.

5. The manifold of claim 4, wherein the first tube is formed from glass.

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6. The manifold of claim 4, wherein the first tube is formed from ceramic.

7. The manifold of claim 3, wherein the connector between the first tube and the second tube is a compression fitting that sealingly mates the first tube to the second tube.

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8. The manifold of claim 2, wherein the plurality of laser block assemblies are arranged adjacent to each other to form the stacked array, with a thickness of each of the laser block assemblies being in a plane substantially parallel to the longitudinal axis of the elongated member.

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9. The manifold of claim 8, wherein the plurality of laser block assemblies are arranged adjacent and parallel to each other to form the stacked array.

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10. The manifold of claim 2, wherein each of the laser block assemblies comprises:

a laser block having an optical closed loop path; and

at least two electrodes in fluid communication with the optical closed loop path and adapted to be connected to a source of electrical potential, one electrode including a fluid port;

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wherein the seal between the laser block assembly and one of the plurality of passages of the elongated member fluidly couples the optical closed loop path of the laser block assembly to the manifold.

11. The manifold of claim 10, wherein the seal between each of the laser block assemblies and the elongated member comprises:

- 5           a first tube fluidly connected to one of the plurality of passages of the elongated member;
- a second tube fluidly interconnected between the first tube and one of the laser block assemblies; and
- a connector between the first tube and the second tube.

10           12. The manifold of claim 11, wherein the first tube is an isolation tube formed from a non-conductive material.

          13. The manifold of claim 12, wherein the first tube is formed from glass.

15           14. The manifold of claim 12, wherein the first tube is formed from ceramic.